State of Washington
Decision Package

Agency: 343 Higher Education Coordinating Board

Decision Package Code/Title: AP – Statewide Academic Planning System

Budget Period: 2009-11
Budget Level: PL – Performance Level
Program: 010 – Coordination and Policy

Agency Recommendation Summary Text:

A new technology initiative developed collaboratively by the Higher Education Coordinating Board (HECB), the State Board for Community and Technical Colleges (SBCTC), and the state's colleges and universities will become the state's primary resource for academic advising. It will provide online access for students, parents, faculty and advisers to powerful degree-planning tools and services that will speed student academic progress. The system will enable students to examine their entire college history online, and to view in real time how credits earned or planned may apply to any degree program offered by any state institution. The proposed Academic Guidance and Planning System (GPS) responds to a principal goal of E2SHB 2783: Develop a statewide transfer planning system and online planning tool.

Fiscal Detail:

	FY 2010	FY 2011	Total
Operating Expenditures			
001-1 General – State	$2,961,000	$2,852,000	$5,813,000
Total Cost	**$2,961,000**	**$2,852,000**	**$5,813,000**
Staffing			
001-1 General – State	5.0	5.0	5.0
Total FTEs	5.0	5.0	5.0
Revenue Detail **Fund Source**			
None	$0	$0	$0
Total Revenues	**$0**	**$0**	**$0**

Description:

Opportunity

Washington's public postsecondary education system affords many pathways to a degree. However, it could be said the current system favors access over successful and efficient degree completion. The new Academic GPS addresses this imbalance by making it much easier for students—early in their academic experience—to find exactly the courses they will need to accomplish their specific degree goals.

Improving the rate at which students successfully transfer from lower-division to upper-division coursework has great potential to raise the level of educational attainment in Washington, a key goal of the 2008 Strategic Master Plan for Higher Education.

Annually, more than 32,000 students transfer from one Washington higher education institution to another. These students belong in four categories:

1. 15,000 transfer from a community or technical college to a baccalaureate institution.[1]
2. 10,000 transfer between community and technical colleges.[2]
3. 5,000 transfer from baccalaureate institutions to community and technical colleges.
4. 2,000 transfer between baccalaureate institutions.

However, far too many students who enter postsecondary education saying they want to achieve a baccalaureate degree do not realize their dream. One reason for this may be a lack of clear information that allows them to compare their educational options in context. Any time students must repeat a course or earn credits beyond the number required for a degree because credits from one institution were not accepted by another, the additional requirements constitute a barrier to efficient and effective degree completion. Minimizing unnecessary course-taking will improve student time-to-degree and may increase the likelihood of completion. Reducing unnecessary course-taking also frees up more enrollment slots, making room for more students at the institutions.

The Academic GPS would guide students toward the most efficient pathways to achieve their degree goals by connecting them to each college and university course database, enabling one-stop degree planning from any computer linked to the Internet. It would:

- Provide detailed information on the transferability of specific courses among Washington institutions.
- Illustrate what courses must be completed at each institution to achieve a degree goal in a selected major.
- Provide system-wide, comprehensive and consistent information about transfer to advisors, faculty, and other professional staff who interact with and support students making decisions.

In the 2004-05 academic year, only half of those who had enrolled in community and technical colleges in 2001-02 intending to pursue a bachelor's degree had actually transferred to public four-year colleges in Washington within three years.

Students don't reach their goals for a number of reasons, including changes in their personal lives, finances, or employment. Meaningful information made easily accessible may help many of these at-risk students by 1) preventing them from abandoning their degree plans by revealing degree options they may not have been aware of; 2) preventing them from wasting money (both their own

[1] Data provided by the State Board for Community and Technical Colleges
[2] Student Mobility Among Washington Institutions of Higher Education: 2005-06. https://fortress.wa.gov/hecb/portal/default.aspx/Common/Mobility%20Report/default.aspx. Accessed August 7, 2008.

money through tuition, and funds provided by the state as a subsidy) by taking credits they don't need; or 3) preventing them from waiting for classes that won't be available.[3]

History

The need for such a system has been recognized for several years. Passed in 2004, HB 2382 directed the HECB to convene a work group to research the essential components of a Web-based student advising system. Subsequently, a team of representatives from the state's two- and four-year, public and private institutions examined systems in other states, evaluated alternatives and costs, and identified features of an ideal system prior to submitting a report to the Legislature in January 2005.

Based on this research, the group developed requirements that became the basis for a 2007 pilot program involving Bellevue Community College and the University of Washington. The pilot included surveys and focus groups with students, faculty and staff to gather detailed feedback on how the system should look and function. The system proved highly successful.

Yakima Valley Community College, Walla Walla Community College, and Columbia Basin College also developed and piloted an online education planning system (Ed Plans) during this period. That project focused on developing tools to enable better degree and transition planning. However, it was applicable only to the community and technical college system.

Following the 2007 legislative session, the HECB and SBCTC began collaboratively developing a unified system. Encouraged by the direction provided in HB 2783 during the 2008 session, this work continued. Principal objectives of E2SHB 2783 required the HECB to develop work groups to address four issues related to student success: a statewide transfer planning system; an online planning tool to facilitate access to this information; a means to identify, at time of registration, course applicability to degree goals; and a list of transfer students' rights and responsibilities. Although HB 2783 did not become law, the Governor directed the groups to continue work and submit a combined proposal for the 2009 legislative session.

In 2008, the HECB and SBCTC met with students, faculty and staff from the state's two- and four-year, public and private higher education institutions to learn more about how the system would need to work to serve everyone's needs. Students who participated in a focus group hosted by the Joint Access Oversight Group (JAOG) June 25, 2008 shared information on their transfer experiences and voiced unanimous support for a Web-based advising system.

Reducing Complexity

A centralized, online degree-planning tool is needed to provide students and advisers with accurate, easy-to-understand information about the exact combination of courses that will best suit their intended major at multiple baccalaureate institutions. Such a tool will also benefit advisers, who do not have access to a common resource when helping plan students' degree programs.

[3] Higher Education Coordinating Board. (2007). *2008 Strategic master plan for higher education in Washington*. (pp.20). HECB. (December 2006). *Consolidated transfer report* (pp. 7).

The challenge is complexity. All of the state's baccalaureate institutions have some specific course prerequisites for particular degree programs. Currently, students must consult individual institutional Web sites or catalogs to determine how their courses would be accepted for transfer at a four-year institution. Each public four-year institution uses a different format for communicating this information.

Some institutions maintain interactive online systems that allow students to enter a course taken at a community college and receive its equivalent at the four-year college. Others maintain their information in PDF or HTML formats that are not interactive. New technology is available to eliminate these roadblocks. Electronic transcript systems allow a student to upload his or her entire transcript for evaluation. They then return a printout describing which courses are needed to complete a degree.

Students at community colleges need access to the degree audit systems of four-year institutions. Degree audit systems are powerful tools that describe degree requirements and help students track their progress. Currently, students have access to degree audit systems for only the institution to which they have been admitted. The Academic GPS will make it possible for all students to use these tools.

It will do this by establishing well-maintained links to existing systems, making it possible to list new courses and delete obsolete courses in real time. It also will track changes in course content, which can affect how a course will apply toward a major.

The new system will make information about these types of changes broadly accessible to students, advisers and faculty on a timely basis. Online systems used by other states are speeding the decision-making process for course prerequisites. They allow faculty to share information more easily and make decisions more quickly about which courses meet the requirements of their degree programs. Any system implemented in Washington will also need to provide institutions tools to manage, publish, and maintain course equivalencies on-line.

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How to Address this Opportunity

A policy goal of the 2008 Strategic Master Plan for Higher Education is to "Develop an array of simple and accessible information tools to help students and adult learners understand and navigate through the postsecondary education system" (p. 36).

The proposed Academic GPS will help students streamline their pathway to a degree by making available, at a single Web site, comprehensive information and specific guidance as they plan the progression of their academic work.

The HECB and SBCTC recommend purchasing a Web-based system which includes the ability to deliver the functions listed below. The HECB and SBCTC are in the process of evaluating systems through a Request for Information (RFI) process. The agencies will find the best fit to critical requirements identified by users at the lowest risk of failure, the conduct a Request for Proposals (RFP) process to select a vendor.

Desired Features of System Funding Package will Buy

Other states have developed Web-based advising systems (e.g. California, Georgia, and Florida). A few are in the process of developing similar Web-based advising systems (e.g. Pennsylvania, Connecticut, and South Carolina). Generally, Academic GPS will include components of these developed systems that address our state's unique needs:

- Online advising efficiencies for students transferring across sectors (from a two-year college to a four-year college, from a four-year college to a two-year college) and within the same sector (two-year college to two-year college, four-year college to four-year college).
- Leverage various data sources that influence a student's academic planning efforts by providing the student and adviser a consolidated look at high school, college and transfer information pertinent to academic planning. Data could include high school transcripts, high school and college test results, career testing, college transcripts, degrees and certificates.
- Centralized data storage and maintenance which would be performed by the vendor.
- Interactive, Web-accessible course equivalency tables – crosswalks that translate one course to another at different institutions.
- Student-, staff-, and public-friendly user interfaces that allow side-by-side comparisons of different degree plans so that students can plan the optimal use of their credits and outline a "best route" (academic and use of resources) through academic systems.
- Interaction among existing systems – the ability to reduce additional work for institutions by electronically interfacing with degree audit systems already in place. This link provides an opportunity for students to evaluate courses completed or planned based on degree requirements at the receiving institution.
- Capacity to link to degree audit systems at Washington community colleges, and accept both individual courses and a "package" of courses (such as an associate transfer degree) from community college transfer students.
- Ability to send and receive electronic student records or unofficial transcripts between institutions, and to allow students to upload their electronic record for evaluation against various degree requirements.
- Faculty and staff communication – a vehicle for faculty to communicate online to help determine, maintain, and update course equivalencies.

- Web-based surveys for soliciting and collecting student/user feedback on the effectiveness of the system to provide for continuous improvement.
- Data gathering tools on system use and functionality for use by institutions for schedule planning and by the HECB, SBCTC and other state agencies for analysis and policy review.
- Inclusion of a comprehensive list of the degree programs offered in the state by both public and private colleges and universities, and tips to help transfer students plan.
- User-friendliness, a unified statewide "look and feel," and options for institutional branding.

An estimated timeline for the project is provided below. The HECB and SBCTC are proposing a marketing plan to maximize student, faculty and staff awareness about the new system. Since course equivalencies and degree requirements already exist in some form at the baccalaureate institutions, the timeline for implementation is expected to take 18 months. The HECB will use existing resources to work with the successful RFP vendor to finalize system requirements, gather specifications for existing degree audit and student information systems, and develop a final implementation plan prior to July 1, 2009.

July 11, 2008 - August 11, 2008	Take data obtained through the pilot project and statewide requirements gathering project and incorporate into a Request for Information (RFI).
August 11, 2008 - December 1, 2008	Take information obtained through the RFI, craft a Request for Proposals (RFP), and release for bid. Engage in selection process and identify successful vendor.
December 15, 2008 - April 2009	Vendor to work with HECB and SBCTC to finalize system requirements, gather specifications for existing degree audit and student information systems, and develop implementation plan.
July 1, 2009 - June 2010	Obtain and upload course catalogs, major programs of study, course equivalencies, and degree requirements. Design interfaces and implement interfaces with existing systems. Design marketing plan to communicate the system's capabilities.
June 2010 - December 2010	Beta-test system with selected groups of colleges, staff, faculty, and students.
January 2011	System becomes available statewide. Implement marketing plan.

Narrative Justification and Impact Statement:

- **What specific performance outcomes does the agency expect?**

Desired Results[4]

- Help more people achieve degrees more efficiently, increasing overall educational attainment in the state.
- A significant increase in the number of students who transfer successfully between two- and four-year institutions as measured under the current accountability framework.
    - The proposed Web-based tool will enable students to plan a course of study, explore course sequencing, and track progress toward degree objectives; link existing degree audit systems; and integrate information across the state.
    - Improved online access to centralized information will promote student retention and transition with specific emphasis on improving transfer pathways.
- Increase student satisfaction with transfer process

More students than ever are taking classes at multiple institutions. To help them complete their degrees more efficiently, higher education needs to improve how it manages and communicates about course equivalences and articulation. Students who have access to the proposed "cafeteria" approach will have a much better chance of succeeding, thereby contributing to the goal of a more educated population.

Once the system is implemented in January 2011, it is expected that more community college students will transfer to baccalaureate institutions and that they will begin to require fewer total credits toward their degree. About 15,000 students transfer yearly from community and technical colleges to public and private baccalaureate institutions. If each of these students can reduce his or her course load by five credits, more than 75,000 credits will be "saved" annually – that is, those credits could be converted to necessary credits earned by other students toward additional degrees. This can be expressed as the equivalent of 1,667 annualized FTE students (AFTE), which will result in an efficiency gain to the state of $7,343,135.[5,6]

Performance Measure Detail:

	Incremental Changes	
Performance Measure Description	**FY 2011**	**FY 2012**
Number of fewer unnecessary credits students take prior to transfer to a baccalaureate institution	No change (implementation year)	75,000

[4] Higher Education Coordinating Board. (2007). *2008 Strategic master plan for higher education in Washington*. (pp.36).

[5] 15,000 students transfer per year from two-year institutions. Credit per year savings per student (5 credits) is a conservative estimate based on data from the SBCTC Student Data Warehouse and reported in HECB Consolidated Transfer Report, December 2006. P.30. According to analysis completed by the SBCTC, the typical students who earned the Associate of Science –Transfer degree (AS-T) took eight credits less than their peers who took the science/engineering DTA.

[6] State savings based on 2007 general fund expenditures per budgeted FTE student for community and technical colleges of $4405. Source: Legislative Evaluation and Accountability Program Committee.

Improved degree performance will be measured by a reduction in the number of credits transfer students who graduate take on their way to preparing themselves for transfer to a baccalaureate institution. This change can be reported by using outcome data available in the Public Centralized Higher Education Enrollment Statistics database by all public institutions.

Student Satisfaction
Information gathered from student focus groups suggested dissatisfaction with the current transfer process. Implementation of Academic GPS should result in improved student and stakeholder satisfaction with the transfer processes in Washington.

The proposed system will continuously gather customer 'feedback' and capture other student- and stakeholder-related information. Ongoing improvements to this data-gathering process will be implemented.

Impact on Primary Clients
Students will be the primary clients/users of this system. Students will continue to participate in focus groups and surveys during project implementation in order to best understand how they need the system to function. If the system is rolled out statewide, students will be surveyed again to determine the system's impact on:

- Ease of transfer.
- Understanding of courses that will transfer and those that will not.
- Understanding of degree options and requirements.

Impact on Other Clients
Staff and faculty at the two- and four-year institutions are also clients/users of the system. The HECB and SBCTC will measure improvement against a set of current advising benchmarks such as the effectiveness of existing student and course-credit transfer processes and services, including any systems used to support student advising. This information will be used to measure gains in efficiency once the system has been implemented, tested, and used for at least two full academic years.

The proposed Academic GPS will also create reports designed to provide the participating institutions with institution usage and student usage data (in aggregate). Faculty and staff will have the opportunity to specify reports and report content appropriate to the goals of their institutions.

Impact on Other Agencies or Governments
Four-year institutions currently review paper or Web copies of every other institution's catalogs for changes in curriculum and subsequent review of courses deemed as "equivalent." This is time-consuming, and the need for manual review will be eliminated with the implementation of a statewide course equivalency system.

A statewide online advising system also has the potential to reduce advising staff workloads and substantially improve the efficiency and effectiveness of advising sessions. While not a substitute for face-to-face interactions, the system will enable students to create their own degree plans as they become increasingly familiar with it. This will save time, by allowing advisers to spend their sessions with students discussing major requirements, differences

between individual courses, and applicability to employment following graduation. Advising staff and registrars will also have access to the system, using it to manage equivalencies and as an additional planning tool in their interactions with students.

Each institution now has systems in place to determine course equivalencies and degree requirements. Institutions surveyed by the HECB and SBCTC in July 2008 indicated they would need assistance modifying their systems to participate in the proposed Academic GPS. Therefore, grant funding is built into this proposal to serve individual institution needs.

The community and technical colleges have been developing a centralized system to manage transfer among two-year institutions. In addition, some of the four-year institutions have developed their own student advising systems and interactive course equivalencies for students who plan to transfer from a two-year college. This budget request primarily focuses on transfer from a two-year college to a four-year institution. It is hoped the system will also link with systems that manage two- to two-year transfer.

Since we are looking at a hosted solution, the impact on campus staffing and equipment needs are difficult to predict without knowing more about the system. Some funding will be needed for staff support during roll-out. Implementation will require involvement of functional experts on campuses.

This proposal calls for hiring a full-time project manager and a team of six highly skilled implementation staff. Two implementation teams will go to each campus as the system is rolled out to cohorts of colleges over an 18-24 month timeline.

In addition, a "train the trainer" model will be employed; as institution functional users gain expertise in implementation information will be shared with other campuses. Early implementers will act as a resource for others, thus bringing the educational system into alignment.

Each campus will identify a core implementation team. A grant process will be used to offer grant dollars to use as they see necessary for project implementation. This could be for temporary staff, overtime pay, back-fill positions, or equipment. This core implementation team will be critical to the success of this project as implementation might be seen as putting a strain on the key functions on campus involved in implementation.

This implementation team methodology for roll-out is critical so that system-wide implementation can occur over a short period of time. If we move too slowly we will always be chasing technology. In addition, work group members felt that if the state does not provide this type of service private, for-profit competitors will to the detriment of state citizens.

- **Performance Measure Detail:**

  Implementation performance measures:
  - On time
  - Number of colleges implemented
  - On budget

Use performance measures:

- Student use, initially and over time
- Improved graduation efficiency of transfer students
  - Reduction in excess credits beyond degree requirements
  - Avoidance of unnecessary cost to state
- Student satisfaction with system after implementation (built in system rating mechanism)

- **Is this decision package essential to implement a strategy identified in the agency's strategic plan?**

Developing a statewide advising system allows the HECB to carry out its statutory responsibility, as outlined in RCW 28B.76.240, 2401, and 260. In addition, the HECB's *Strategic Master Plan for Higher Education*[7] proposes the development of a course equivalency and major applicability system.

A major part of the HECB's strategic plan focuses on implementation of the Statewide Strategic Master Plan for Higher Education. One of three broad efforts to achieve the Master Plan vision for 2018 is "first and foremost, we will need to get more people into postsecondary education and help them succeed once they get there (p. 11)." In addition, "we need more baccalaureate and advanced degrees, and more space for those who take their first two years of study toward a baccalaureate degree in a community or technical college" (p. 13). Furthermore, to promote economic growth and innovation, "we need to prepare more people for high-demand fields such as science, technology, engineering, mathematics and healthcare." (p. 13)

Policy goals outlined in the Master Plan specific to this proposal include:

- Develop an array of simple and accessible information tools to help students and adult learners understand and navigate through the postsecondary education system (p.21; p.36).
  - Action: The HECB will convene a task force to develop a comprehensive plan to expand the use of online communication (web sites, software, email) to support and retain students through their transitions among higher education institutions with specific emphasis on transfer pathways. The workgroup will recommend funding for the plan in the 2009-2011 biennial budget. (p.36)

An expected outcome of this work as outlined in the Master Plan is to see a "significant increase in the number of students who transfer successfully between two- and four-year institutions as measured under the current accountability framework" (p.36).

- Develop a Web-based tool that allows students to plan a course of study, explore course-sequencing, and track progress toward degree objectives; link existing degree audit systems; and integrate information across the state (p.36).
- Expand the use of online communication to support and retain students through their transitions among higher education institutions with specific emphasis on transfer pathways.

[7] Higher Education Coordinating Board. (2007). 2008 Strategic master plan for higher education in Washington.

- **Reason for change:**
  This system is meant to assist students with their degree planning. When fully implemented the system would allow students to efficiently plan their academic work and check their plan against the degree requirements at multiple institutions. Through the availability of better information than is currently available students should be able to avoid taking courses that will not apply to their chosen degree program, more easily and efficiently adjust their schedule if they change their intended major or transfer destination. The overall impact of the system would be a reduction in total credits students take to achieve their degree goals.

- **Does this decision package provide essential support to one of the Governor's priorities**
  Yes – Educating to Compete:
  Governor Gregoire believes that "Washington's fastest growing industries, such as aerospace, high-tech and bio-technology, require highly skilled workers with a strong basic education, college and advanced degrees… More of our students must have access to higher education. We need to make sure that there is enough room in our colleges and universities and that the quality and relevance of programs is the best available."

  The governor's veto message on Engrossed Second Substitute House Bill 2783 states:

  "I am also directing the HECB and the SBCTC to refine and combine their plans for a Web-based advising system. A single, unified proposal should review and build upon the Joint Access Oversight Group's focus group work, the SBCTC program plan, and other work. I am also directing that the solution, products, and recommendations from the above efforts be presented to the P-20 Council. I am looking forward to this report."

  This decision package directly addresses the Governor's priorities.

- **Does the decision package make key contributions to statewide results?**
  Yes ☒ **No** ☐

- **Would it rate as a high priority in Priorities of Government (POG) process?**
  Yes ☒ **No** ☐
  This proposal relates directly to one of Governor Gregoire's Priorities of Government: The Value of Postsecondary Learning. Specifically, the proposal addresses the need to increase the percentage of adults completing certificates/degrees (Indicator 1) by increasing efficiency of transfer to four-year institutions; improvement in system efficiency (indicator 2); and improving the responsiveness to workforce needs – degrees conferred in high-demand fields (indicator 3).

- **What are the important connections or impacts related to this proposal?**
  This proposal has broad support from the following groups as determined through surveys, continuing workgroup meetings, other educational stakeholder group meetings, and student focus groups:
  - Higher Education Coordinating Board
  - State Board for Community and Technical Colleges
  - Workforce Training and Education Coordinating Board

- Joint Access Oversight Group (JAOG), a standing committee of representatives from the public and independent academic degree-granting institutions and the HECB
- Intercollege Relations Commission (ICRC), a unit of the Washington Council on High School College Relations. Membership is comprised of representatives appointed by the presidents of all public baccalaureate universities and community and technical colleges, as well as many private colleges in Washington State
- Council of Presidents (COP)
- Independent Colleges of Washington (ICW), an association of 10 private, liberal arts, nonprofit colleges in the state
- The Office of Superintendent of Public Instruction
- Northwest Career Colleges Foundation
- Washington Student Lobby

- **Alternatives explored by agency:**
  While alternatives were explored when HB 2382 in 2004 directed HECB to study these issues, broad alternatives were not explored this year due to the governor's specific direction in the veto message of E2SHB 2783 that the agency refine this particular proposal. The two primary technical alternatives were explored in depth over the past three years and that information is available upon request.

- **Effects of non-funding:**
  Some students will continue to struggle through a sometimes confusing array of information to find the variety of sources that may assist them in planning their educational path. Other students will be frustrated with the difficulty involved in researching how courses transfer and apply to degrees, and will instead "wing it," possibly taking the wrong courses in the process.

  In addition, the state will produce fewer degrees for a given level of investment due to excess credits being taken by students who are being funded by state financial aid dollars. This will make achievement of Strategic Master Plan for Higher Education goals more challenging.

- **Relationship to the state's capital budget:**
  None

- **Revisions required in an existing statute, Washington Administrative Code (WAC) contract, or state plan:**
  None

- **Expenditure and revenue calculations and assumptions:**
  Revenues Calculations and Assumptions:
  None

  Expenditures Calculations and Assumptions:
  Assumptions
  - This budget request focuses on funding to accommodate student transfer within the State of Washington.

- We are looking at a hosted solution; the impacts on campus staffing and equipment needs are difficult to predict without knowing more about the system. Some funding will be needed for staff support during roll-out. Implementation will require time involvement of functional experts on campuses.
- This proposal calls for the hiring of a full-time Associate Director/Project Manager and a team of four highly skilled staff for the duration of implementation phase
- In addition, a "train the trainer" model will be employed. As institution functional users gain expertise in implementation, information will be shared with other campuses. Early implementers will act as a resource for others, thus bringing the educational system into alignment. There is no budget impact associated with this component of implementation.
- A grant process will be used to offer grant dollars to campuses to use as they see necessary for project implementation. This could be for temporary staff, overtime pay, back-fill positions, or equipment.
- Implementation team methodology for roll-out is critical so that system-wide implementation can occur over a short period of time

In FY 2010, the HECB (as fiscal agent) will establish a contract with the successful bidder that will include an ongoing license cost of $1,000,000 per year. License costs are estimated to increase 3 percent per year after implementation. In addition, estimated software implementation costs would be $600,000 for Year One and $500,000 for Year Two.

The request includes one-time implementation grants of up to $20,000 per campus for a total of $600,000 each year to be used by institutions as they deem necessary for project implementation. This could be for temporary staff, overtime pay, to back-fill for skilled positions, or equipment.

Staff-related costs of $114,000 and 1.0 FTE Associate Director/Project Manager are ongoing. Program Associate costs for 4.0 FTE (implementation team members) in Year One and Year Two total $584,000. Program Associates (implementation team members) are phased out after Year Two.

The implementation team strategy reduces the number of staff substantially from an alternative solution of FTE support at each institution. Extensive travel requirements for Implementation Team members (including Associate Director/Project Manager) result in high staff-related direct travel costs: Year One and Year Two equals $177,000 per year. This assumes 150 days of travel per year for each of the implementation team members. This is a conservative estimate mitigated by ITV, work from home, and teleconferencing. Ongoing travel costs after Year Two are $8,000 for the Associate Director/Project Manager, who will have a space assignment at the HECB. One-time direct equipment costs associated with staff are budgeted at $9,000 in Year One.

Goods and services reflect ongoing marketing and communication costs of $20,000 per year. In addition, costs in Year One and Year Two reflect expenses associated with implantation team staff.

- **Which costs and functions are one-time? Which are ongoing? What are the budget impacts in future biennia?**

  One-time costs: Software implementation costs - FY1 $600,000 and FY2 $500,000; grants to campuses - FY1 $600,000 and FY2 $600,000; staffing costs for Program Associates - FY1 $292,000 and FY2 $292,000; and travel costs for Program Associates FY1 $169,000 and FY2 $169,000.

  Recurring and Ongoing costs: Ongoing software license costs and fees and HECB Associate Director/Project Manager staff-related costs. It is expected to cost roughly $1.2 million annually to maintain the system. This estimate includes software subscription/maintenance of $1,100,000, staff related costs of $114,000 including benefits, and marketing and communication costs of $20,000.

Object Detail:

	FY 2010	FY 2011	Total
Operating Expenditures			
A – Salaries	$310,000	$310,000	$620,000
B – Benefits	$96,000	$96,000	$192,000
C – Personal Service Contracts	$620,000	$520,000	$ 1,140,000
E – Goods and Services	$1,149,000	$1,149,000	$2,298,000
G – Travel	$177,000	$177,000	$354,000
J – Equipment (over $5,000 per item)	$9,000	$0	$9,000
M – Transfers to trust funds	$0	$0	$0
N – Grants to students or others	$600,000	$600,000	$1,200,000
Total Objects	**$2,961,000**	**$2,852,000**	**$5,813,000**

Investment Analysis for IT Investment Decision Packages

Information Technology (IT) Addendum

Description:

What does the proposed IT investment actually buy?
The IT investment in the Academic GPS will purchase the following services:

1. Hosting Services – it is expected that the Academic GPS will be a vendor-hosted system for which the vendor will charge an annual fee.
2. Design and Customization Services – the selected vendor, working closely with the Academic GPS project manager(s), will provide design and customization services to tailor the system, to the extent possible, to meet the requirements outlined in the system requirements document. These services include, but are not limited to: construction of interfaces for data sharing between the Academic GPS and existing institutional applications (e.g. degree audit, student information systems, etc.); system branding; and data loading.
3. Implementation Services – the implementation of the Academic GPS at the numerous institutions across Washington will require a significant amount of focused and dedicated expertise. It is expected that the selected vendor will provide the bulk of this expertise.
4. Ongoing Support and Maintenance Services – it is expected that the Academic GPS will require ongoing support and maintenance from the vendor for which the vendor will charge an annual fee.

What is the nature of the business this technology will support?
The Academic GPS will provide online, anytime/anywhere support to students in finding the most efficient pathways to achieve their degree goals by connecting them to each college and university course database in a clear and consistent manner, enabling one-stop degree planning from any computer linked to the Internet.

How will this technology investment change the current process or the experience of customers, business partners or the public?
The primary way this technology investment will change the current experience of customers, business partners and the public is by reducing the complexity associated with planning and achieving degree goals within Washington State's higher education system. Additionally, the Academic GPS will provide the needed information to a broader audience than is currently possible.

Who are the expected customers and what are the expected transaction volumes?
The primary customers expected to use this system are Washington higher education students and advisors. Secondary customers may include parents, the general public, and other academic business partners.

Transaction volumes will depend upon the number of institutions participating, the number of courses and programs offered, the number of transfer students who choose to use the system, and the number of "what if" scenarios each student chooses to create. As a hosted system, it is expected that the selected vendor will ensure that transaction levels are satisfactorily accommodated by the system.

How does the investment support the state's Strategic IT goals:

- **Invest in common systems**
  This investment seeks to establish a common system for use by all institutions of higher education within the State of Washington.
- **Promote data sharing**
  By establishing a common framework for academic guidance and planning, this system will promote data sharing between all institutions of higher education within the State of Washington.
- **Promote common IT practices**
  By establishing a common framework for academic guidance and planning, this system will also establish a common infrastructure, common interface, common functionality, and common end-user experience for all higher education institutions and their students.
- **Leverage the state's buying power.**
  By partnering with all institutions of higher education within Washington, the HECB and the SBCTC seek to maximize the state's buying power. This process will produce a contract that is available to all of these institutions.

Is the project or commodity investment in the agency's IT Portfolio: Yes ☒ No☐

What is the oversight level for this project or commodity investment?
The oversight level for this project is Medium Severity/Medium Risk (assessment conducted with DIS representative on 8/25/2008).

Severity Level Criteria

The severity matrix assesses the proposed project's impact on citizens and state operations, its visibility to stakeholders, and the consequences of project failure. The highlighted text indicates the severity level identified for this project.

	Categories			
Levels	**Impact on Clients**	**Visibility**	**Impact on State Operations**	**Failure or Nil Consequences**
High	• Direct contact with citizens, political subdivisions, and service providers – including benefits payments and transactions.	• Highly visible to public, trading partners, political subdivisions and Legislature. • Likely subject to hearings. • System processes sensitive / confidential data (e.g. medical, SSN, credit card #'s).	• Statewide or multiple agency involvement / impact. • Initial mainframe acquisitions or network acquisitions.	• Inability to meet legislative mandate or agency mission. • Loss of significant federal funding.
Medium	• Indirect impacts on citizens through management systems that support decisions that are viewed as important by the public. • Access by citizens for information and research purposes.	• Some visibility to the Legislature, trading partners, or public the system/program supports. • May be subject to legislative hearing.	• Multiple divisions or programs within agency.	• Potential failure of aging systems.
Low	• Agency operations only.	• Internal agency only.	• Single division. • Improve or expand existing networks or mainframes with similar technology.	• Loss of opportunity for improved service delivery or efficiency. • Failure to resolve customer service complaints or requests.

Risk Level Criteria

The risk matrix measures the impact of the project on the organization, the effort needed to complete the project, the stability of the proposed technology, and agency preparedness. The highlighted text indicates the risk level identified for this project.

	Categories			
Levels	**Functional Impact on Business Processes or Rules**	**Development Effort & Resources**	**Technology**	**Capability & Management**
High	• Significant change to business rules. • Replacement of a mission critical system. • Multiple organizations involved. • Requires extensive and substantial job training for work groups.	• Over $5 million. • Development and implementation exceeds 24 months.* • Requires a second decision package. * Clock starts after feasibility study or project approval and release of funding.	• Emerging. • Unproven. • Two or more of the following are new for agency technology staff or integrator, or are new to the agency architecture: programming language; operating systems; database products; development tools; data communications technology. • Requires PKI certificate. *Complex architecture – greater than 2 tier.*	• Minimal executive sponsorship. • Agency uses ad-hoc processes. • Agency and/or vendor track record suggests inability to mitigate risk on project requiring a given level of development effort.
Medium	• Moderate change to business rules. • Major enhancement or moderate change of mission critical system. • Medium complexity business process(es). • Requires moderate job training.	• Under $5 million but over agency delegated authority. • 12 to 24 months for development and implementation.***** ***** Clock starts after feasibility study or project approval and release of funding.	• New in agency with 3rd party expertise and knowledge transfer. • One of the technologies listed above is new for agency development staff.	• Executive sponsor knowledgeable but not actively engaged. • System integrator under contract with agency technical participation. • Agency and/or vendor record indicates good level of success but without the structure for repeatability.

Levels	Functional Impact on Business Processes or Rules	Development Effort & Resources	Technology	Capability & Management
Low	• Insignificant or no change to business rules. • Low complexity business process(es). • Some job training could be required.	• Within agency delegated authority. • Under 12 months for development and implementation.***** ***** Clock starts after feasibility study or project approval and release of funding.	• Standard, proven agency technology.	• Strong executive sponsorship. • Agency and vendor have strong ability to mitigate risk on a development project. • Project staff uses documented and repeatable processes for tracking status, problems, and change. • Agency or vendor is CMM Level 3 equivalent or above.

Project Approval and Oversight Matrix

The level of approval and oversight required on a given project is determined through an assessment of project risk and severity. The highlighted text indicates the project approval and oversight level identified for this project.

High Severity	Level **2**	Level **2**	Level **3**
Medium Severity	Level **1**	Level **2**	Level **2**
Low Severity	Level **1**	Level **1**	Level **1**
	Low Risk	***Medium Risk***	***High Risk***

What common services will be utilized for this project or commodity investment?

During the procurement announcement phase and the contracting phase, this investment will utilize the Technology Acquisition Services provided by the Department of Information Services.

The investment will also align with the Information Services Board's (ISB) Portfolio Management Policies, including Planning, Investment, Project Management, Security and Enterprise Architecture Program. It will be the responsibility of the Project Manager to ensure that these standards are followed throughout the life of the project.

Is a 903 consultation e-mail confirmation for this project or commodity investment attached to the decision package? Yes ☐ No ☒ (This is required.)

A 903 consultation has been requested and we are waiting scheduling with DIS. The e-mail confirmation will be forwarded as soon as we receive it.

Provide the IT costs and breakdown of all FTEs required to implement this project or commodity investment (do not include ongoing maintenance costs). If IT costs exceed two years, please extend the list accordingly:

IT-related Cost Breakdown (implementation)				
	Year 1 FY10	**Year 2 FY11**	**Add additional years as needed**	**Totals**
IT FTEs - (For each job type, list the number of staff and the total salary and benefits) ▪ ***Associate Director/Project Manager – 1FTE*** ▪ ***Program Associates – 4FTE***	 **$114,000** **$302,000**	 **$114,000** **$302,000**		 **$228,000** **$604,000**
IT FTE costs (Salary and Benefits)				
Purchased Services Contracts	**$600,000**	**$500,000**		**$1,100,000**
Personal Services Contracts ▪ Project Manager ▪ Quality Assurance ▪ IV&V ▪ All others combined				
Hardware Purchase or Upgrades				
Hardware Maintenance				
Software License Purchase or Upgrades	**$1,000,000**	**$1,000,000**		**$2,000,000**
Software Maintenance				
Hardware Lease or Finance (including servers)				
Maintenance & Operations (including DIS)				
Training				
Travel				
Other (Specify)				
Annual Total	**$2,016,000**	**$1,916,000**		**$3,932,000**

Provide the IT costs and IT FTE breakdown for ongoing maintenance and support of this project or commodity investment (these costs should not include implementation costs listed in the table above):

Cost Breakdown (maintenance)						
	Year 1 FY10	**Year 2 FY11**	**Year 3 FY12**	**Year 4 FY13**	**Year 5 FY14**	**Totals**
IT FTEs – (For each job type, list the number of staff and the total salary and benefits) ▪ ***Associate Director/Project Manager – 1FTE***			**$114,000**	**$114,000**	**$114,000**	**$342,000**
Purchased Services Contracts						
Personal Services Contracts						
Hardware Purchase or Upgrades						
Hardware Maintenance						
Software License Purchase or Upgrades			**$1,030,000**	**$1,060,900**	**$1,092,727**	**$3,183,627**
Software Maintenance						
Hardware Lease or Finance (including servers)						
Maintenance & Operations (including DIS)						
Training						
Travel						
Other (specify)						
Annual Total			**$1,144,000**	**$1,174,900**	**$1,206,727**	**$3,525,627**

Was a quote provided to you for this project or commodity investment? Yes ☐ No ☒
If yes, who provided the quote and when? Please attach a copy of the quote.

Is this investment an e-commerce investment? Yes ☐ No ☒
If yes, a copy of the approved Economic Feasibility Study must be attached to the decision package.

Continue completing questions 10 through 14 if the IT request pertains to a project (versus a commodity investment):

Is this a new project or a continuation of an existing project? New ☒ Continuation ☐

Describe how the Project Manager and Quality Assurance will be acquired (i.e., existing state employees, hire new staff, or contract with vendor):
A full-time project manager will be hired to oversee the implementation of the Academic GPS. Quality assurance oversight will be handled by a DIS representative.

Describe your project management approach.
The project will apply the appropriate best practices as outlined in the Information Services Board's Project Management Framework.

The Executive Director of the HECB, Ann Daley, will serve as executive sponsor of the project. A full-time project manager will be hired by the HECB to oversee the implementation of this project. The project manager will ensure proper project management controls are in place throughout the project.

The project manager will report to a steering committee that will provide oversight and guidance to the project.

Additional quality assurance oversight will be provided by the Department of Information Services.

Provide the estimated project duration and estimated start date.
The estimated start date of the project is July 1, 2009.

Where will the system be hosted?
It is expected that the system will be hosted by the selected vendor.